A Journal Devoted to Healthful Living

HEALTH

ESTD. JAN. 1923

Edited by Dr. U. Rama Rau & U Krishna Rau M.B.B.S.

Annual Subscription: Rs. 2. Foreign—Rs. 3. Post paid

Editorial and Publishing Offices:—

323-24, Thambu Chetty Street, George Town, Madras

Vol. XXI | APRIL, 1943 | No. 4

HEALTH AND INSURANCE COMPANIES

"THOSE who believe in the value of health education," writes the *British Medical Journal*, (4-7-42) in the course of an editorial on health education "have been encouraged by the experience of the Metropolitan Life Assurance Company of New York." The Company, the journal says, has for years carried out an extensive programme among its industrial policy holders. It has employed every medium of propaganda and advertised health matters in the American weekly magazine "Time." 'The Company has of course been able to follow up its general programme with the special educational efforts of its agents, who come in contact with the individual person in the home. The Company itself would probably be the last to claim that it did this work from philanthropic notions or from the reaction of an acute social conscience. It started and has continued, the work **because it pays.** Since 1911, the policy-holder group is estimated to have gained about 17 years in life expectation as compared with about 10 years for the country's population in general. Close analysis shows that since 1911 there has been a 95% improvement in diphtheria mortality in the industrial-policy-holder-group—93% gain. In pneumonia there has been a 7% gain, in tuberculosis 10% gain, in puerperal diseases a 17% gain.'

'The insured group has been subjected to intensive health campaign. The Company provides a nursing service for its acutely ill policy-holders. The Company made an attack upon the problem of appendicitis in 1934. The campaign was aimed at preventing unnecessary fatalities from this disease and was carried out by means of pamphlets and articles, advertisements, posters, lectures and news releases. During this period appendicitis mortality improved by more than 30%, and there were no important advances in the diagnosis and treatment of the disease. It would in fact seem reasonable to attribute the improvement obtained to health education.'

Here is a lesson for the Insurance Companies of this country also. If they cannot carry out such an extensive, and eventually expensive, propaganda and programme, they can at least take care of employing only good health teachers as agents; or open training institutions in which the agents themselves may be trained in instruction and propaganda and get themselves qualified for health-education work. This will benefit at least the policy-holder population through the health propaganda of the insurance agents who come in contact with them. We are not suggesting that the insurance companies should take up this work out of philanthropic motives but because it pays, as the illustration quoted above, rightly draws our attention to this point. We may even add to our general suggestion that every insurance company should run a health magazine and distribute it freely to the policy holder group with the avowed aim to enable them to gain in their life expectation and to lead healthful lives. If that is impossible during the war, they may make the best use of the existing health journals by contributing valuable articles and recommending them to the policy-holder-group. Added to this, pamphlets, advertisements, posters and lectures will do no less service. Above all, some concrete and tangible service by establishing hospitals for ill policy-holders, run by insurance companies, will make them popular and attract more business.

But lastly, we should also warn the health propagandists—the insurance companies themselves—against possible hindrances to their efforts. Only one of them should be pointed out by us as it is too subtle to be counteracted easily, and that is, in the words of *British Medical Journal* itself, 'the morbid interest in disease which is kept alive and inflamed by the advertisements of patent medicines.'

The best safeguard against all such subtle anti-currents working against the well-being of people is to stress more and more on prevention of disease by food-propaganda—"instruction in food values and cooking," and by ever intensive health education. The best suited institution in the country for this work is an insurance company, especially during war time when the State cannot be expected to spend much on anything but war effort.

Breast-Feeding

With regard to the establishment of natural feeding, it has been found in my experience in many different areas that those mothers who are attended by the district midwives, although from much poorer and less well-fed homes, show far greater success than those who are admitted to hospital. It is certain that this is due to the misguided interference on the part of their medical advisers. Expectant mothers should be taught that pregnancy, childbirth and lactation are normal episodes in a woman's life, and should be taken in her stride. So much stress is often laid on preparation for breast-feeding that the mother comes to think of it as something difficult to achieve and literally "worries the milk away." Another unfortunate mistake is that of the maternity hospital sister who is over anxious to get the baby's weight up to a prearranged standard before its discharge. She frequently tells the mother how much it has gained at every feed, and is far too ready with the complimentary feed. It cannot be too strongly stressed that, short of actual starvation, the baby should be left alone in its earliest days (except for extra water); as it becomes hungrier it will suckle more vigorously and stimulate the breast.—L. M. M. BEADNELL.—*B. M. J.*, Oct, 1942.

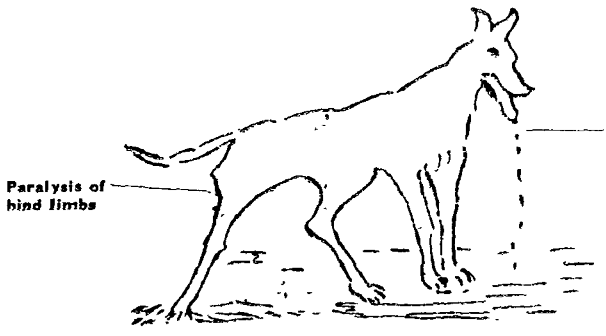
THE RABID DOG AND ITS BITE

By Dr. H. M. KAR,
B.Sc.,(ALLD.), M.B.,B.S., (LUCK.), P.M.S.,
Medical Officer-in-charge,
Civil Hospital, Sikandrabad, U. P.
(Dist. Bulandshahr).

UNLESS one has seen a patient of hydrophobia, the dreadful disease caused by the bite of a rabid dog, one cannot imagine the painful and pitiful condition and Medical Science is still groping in the dark to find out its remedy. Nevertheless, we know its preventive alright and prevention is better than cure!

This disease exists since time immemorial but only in 1804 it was found out that it was caused by the bite of a rabid dog. Previously people thought that the disease originated '*de novo.*' Canines including dogs, jackals wolf and cat are susceptible to rabies, though ordinary goose and even the *cat* is an important reservoir of infection as established recently. These animals carry infection to human beings who suffer from hydrophobia later on. Although hydrophobia is one of the oldest recognised diseases and the very first disease that was studied scientifically, yet, up to this day, it remains more or less a mystery in many respects. That is perhaps what makes this disease so fascinating a study.

It is very difficult to detect the early signs in the rabid dog. There are certain signs which disguise the actual symptoms of the disease. There are two groups of cases *viz.*, (1) excited group and (2) quiescent group. The termination in both the groups is the same *i.e.* paralysis and death. In the first group, the animal is very much excited in its activities. There are certain changes in its daily habits, attitude and movements. It becomes irritated all on a sudden without any rhyme or reason whatsoever, and will attack any one, including his own beloved master. In some cases, the dog becomes abnormally affectionate. But at some other times even a fly or a mosquito can irritate it and it tries to catch the fly or the mosquito. Its voice changes and later there is no voice left. It bites at whatsoever comes in its way and breaks or bears things into pieces. It goes out of its master's house and loiters on the road. It is a curious fact that if the rabid dog is not killed at this stage, it generally returns



A RABID DOG

home just to die. Before death, the hind limbs become paralysed and finally the whole body.

In the second group of cases, there is a transient excitement stage which is generally obscure. The most conspicuous signs are the paralysis of hind limbs and the lower jaw muscles, for which the dog cannot keep its mouth shut and so it has to keep it always open. The tongue protrudes out and saliva dribbles all the time as shown in the *picture* (*vide page 75*). There is an unnatural look in its eyes. The dog likes to be left all alone in the dark corners or underneath the tables etc. It lies quietly and is not tempted by anything. If forcibly disturbed it will bite even its master. While walking it staggers and will try to sit down on its hind limbs. It has an aptitude to drink fluids but it is unable to do so due to the paralysis of pharynx.

The dog should be chained as soon as any of the above symptoms are visible and should not be given any chance to bite any person. The feeds can be given to it but with due care and from a distance, by means of a stick. If the dog is really rabid, it will surely die within a week's time. Sometimes it has been observed that a dog has bitten a person before any signs of the disease could be detected and in these cases the dog has died within 10 to 12 days of the bite. By experience it has been observed that rabies is a highly infectious disease. The small dose of the virus that suffices to produce the disease in a susceptible individual is indeed remarkable. It can be transmitted by the saliva of the dog, even 4 to 6 days before the appearance of signs and symptoms of it. A gentleman was licked by his dog on his chin. The dog developed symptoms of rabies the next day. The owner did not care to get himself treated, as there was no injury on his face and he developed hydrophobia exactly six weeks after and died. A lady carried her sick dog to the hospital. She was never bitten or licked by the dog so far as she could remember, nor had she any broken skin on any exposed part and hence she did not get herself treated. She developed the disease and died later. In these cases the infection could only have gone in, through the tiniest pin prick which was almost invisible to a careful naked-eye examination.

Any way the suspected dog should not be killed unless it naturally dies from the disease itself as otherwise the pathological change in its brain which confirms the presence of the disease, will not appear. The brain of the dead animal shows certain small round or oval bodies called 'Negri bodies' inside the brain cells when seen under the special power of microscope. These are named after the Italian doctor Adelchi Negri who discovered them in 1903. The dead animal should be sent to a veterinary hospital as soon as possible. The dead body of the dog begins to decompose soon after and the pathological examination should be carried out before decomposition starts, specially in summer season.

The incubation period of rabies was said to be as long as twelve years at one time but according to the observation in Pasteur Institute, it is seldom that cases occur three months after the infective bite, though the incubation period of as long as six months, has come under my own observation. The length of the incubation period is generally ascribed to the route of infection being through nerves. That is why it is said that face cases have a shorter incubation period than extremity cases, because the infection in the former cases has to travel through comparatively shorter distance.

Some of the earliest symptoms that I can mention in cases of hydrophobia is the premonition of disaster, the pain in the scar of the bite and priapism. The cardinal symptom which gives the disease its name, *viz.*,

fear of water, comes to appear later. This is due to painful spasms of the muscles of deglutition resulting from efforts at swallowing becoming associated in the patient's mind with water, the most swallowable of all known articles. In fact it is more a fear of the sight of water than a fear of drinking, as some patients can swallow small sips of tea and even water from ice chips melting in their mouth throughout the course of the disease, and many cases do not show this cardinal symptom at all! Any way the appearance of the disease in man after the bite depends on the part of the body bitten and the amount of virus injected, and generally it takes 15 to 21 days.

Among the immediate measures after a dog-bite, the local treatment of the wound is very important, as, earlier this wound is treated, the less is the danger of the disease to appear. The wound should be washed well with an antiseptic if possible, thoroughly dried and then cauterised. The cauterising agent should reach every part of the wound, and for this cutting away the part bitten and bleeding the wound will be beneficial. Pure carbolic acid, pure nitric acid and silver nitrate may be used, and in their absence the wound may be packed with dry potassium permanganate. In the absence of any such cauterising agents, a knitting needle or a piece of iron heated to dull red heat may be used to burn the wound. The limb may be tied by a binder just above the wound as soon as possible.

The cauterization, however efficient it may be, does not do away with the need of specific vaccine treatment, should the dog have been rabid. If the dog is known and if the time elapsing between the bite or lick and the application of the patient for advice is three months or more, the probability of the patient's escape from infection is well founded but it is better to give the appropriate antirabic treatment to avoid the worries of a nervous patient.

We must all know now what is this specific treatment? One should go to the nearest Pasteur Institute and get himself treated. The syringe for the vaccine is sterilised thoroughly with olive oil heated to 160°C., and sterile normal saline. The ampule of vaccine should be shaken thoroughly. The injection is given under the skin and in the abdominal wall. Two places of the abdominal wall are dabbed with Tincture of Iodine and half the dose is injected subcutaneously in each area. Generally 7 to 14 injections are necessary. It must be noted that these injections are not in the least very painful and one can do his daily routine work during this treatment.

Once the disease, hydrophobia appears, there is no treatment for cure yet discovered but the symptoms can be relieved. The patient should be kept in a dark, quiet room, and even draughts of air should be avoided. Generally the patient is excitable and talkative. When violently excited, Morphia gr. $\frac{1}{4}$ is necessary, and may be repeated when spasm are frequent. Feeding is usually impossible though exceptional cases as stated above can tolerate sips of tea etc., and some solid dry food. Nutrient enemata and Glucose per rectum or by intravenous route is advisable.

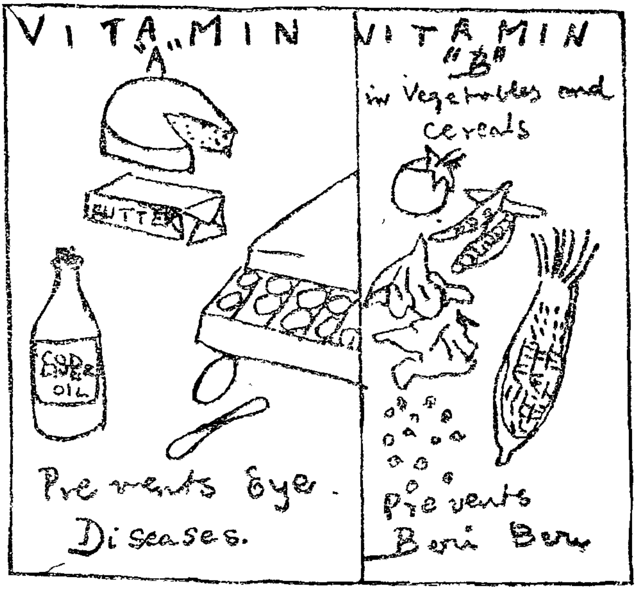
Peace and War

Peace is better than war because in peace the sons bury their fathers, but in war, fathers bury their sons.—*Francis Bacon.*

VITAMINS

By Dr. V. KRISHNAMURTHI RAO, D.M. & S L.P.H.,
Municipal Health Officer, Srivilliputtur.

THE importance of Vitamins has been much stressed now-a-days as they form the essential parts of our food and are required for proper nutrition and maintenance of general health, growth and the various functions of the body. They form the accessory food factors, the want of which may result in certain deficiency diseases. The Vitamins are named A, B, C, D, E, F, and G and of these the former four are important. The Vitamins are present in the food that we eat and need not be purchased from the bazaar. The picture shows the articles of food that contain different vitamins and the main deficiency diseases that their lack in food produces. A short note on the characters of these proximate principles of food stuffs is given below :—



Vitamin A.—It is a widely distributed fat soluble Vitamin derived from carotine pigment which is converted into Vitamin A in the liver. It is fairly stable and withstands ordinary cooking, canning and other modes of food preservation. It is destroyed at high temperatures and by oxidizing agents.

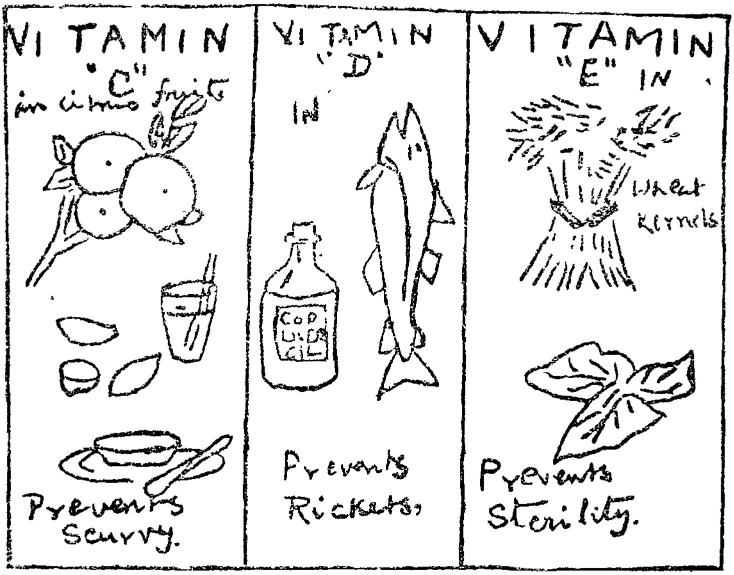
It increases the power to resist against some infections and hence called anti-infective Vitamin. Deficiency of this Vitamin leads to hardening (keratinisation) of the epithelial tissues resulting in eye diseases like keratomalacia (drying up of cornea), hæmatropia (night blindness) and xerophthalmia, respiratory diseases, calculi (stone) in the bladder and diarrhoeas.

Vitamin B.—It consists of two main parts B_1 and B_2 in addition to many other components as revealed by recent researches.

Vitamin B_1 is called anti-neuritic factor and is soluble in water being destroyed at high temperatures. Deficiency of this Vitamin results in loss of appetite, polyneuritis called beri beri which is endemic in Circars due to the use of preserved and milled rice. It is rich in hand pounded rice. yeast and germinating seeds.

Vitamin B_2.—This Vitamin is essential for proper growth of all

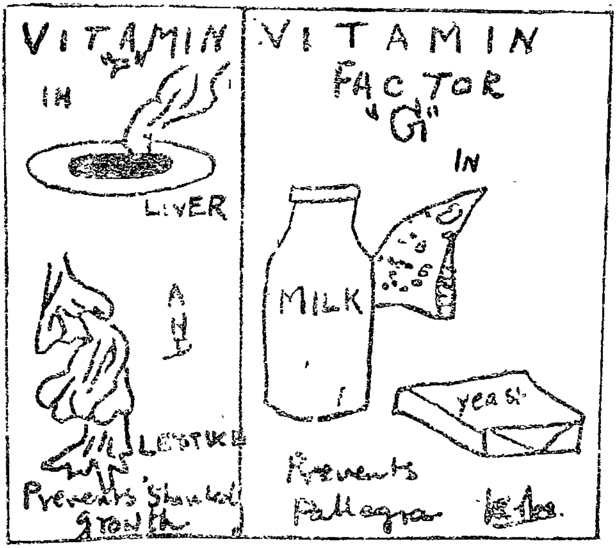
mammals. A liberal intake of this Vitamin B_2 along with calcium and Vitamin A in diet is necessary for maintaining a superior condition of



general health. Deficiency of this produces soreness of angles of mouth and if very much deficient results in pallegra and is also called P. P. factor (Pallegra preventing factor.)

Vitamin C.—It is soluble in water and alcohol and is thermolabile. Its precursor is ascorbic acid and it is also known as anti-scorbutic Vitamin. It loses its potency by drying or keeping it for a long time. It is mostly present in juicy citric fruits and germinating seeds. Lack of this Vitamin results in a disease called scurvy which is characterised by bleeding from gums and petechial hæmorrhages in the skin.

Vitamin D.—It is a fat soluble thermostable Vitamin present in certain fats and oils and is derived from ergosterol and myosterol. The former is present in small quantities in human skin and blood and by the irritation of the ultra-violet rays of the sun gets converted into Vitamin D. Deficiency of this Vitamin produces rickets and hence called anti-ricketic Vitamin.



Vitamin E.—It influences œstrocycle and reproduction, and hence called Anti-Sterility vitamin.

The Causes of Blindness and Prevention

By Dr. L. R. Fernandez
Trichinopoly

It is my earnest wish and hope that the new-born year will see a considerable reduction in the appalling number of blind cases in India. It is with this sincere hope, I begin this article for "Health" which has been a beacon of light to many in this country.

According to the last census available the total number of blind people throughout the length and breadth of this dear land of ours is 600,000. Add to this the vast number of the blind who have escaped the census officers; chiefly the blind in the far-off villages and the stray cases. The total figure may well nigh swell up to another lakh. And all this blindness, preventable if proper care of the eyes had been taken at the proper time by either parents or relatives of these sufferers.

The causes of blindness are many and they are traced from the cradle to the grave, I mean from infancy to senility. As soon as the child is born, if the eyes are not carefully cleaned and a drop of Silver Nitrate solution instilled, the child passing through the unclean maternal passages, is likely to suffer from 'sore eyes of the new-born" or ophthalmia neonatorum. The other diseases that cause blindness are: smallpox, syphilis, trachoma, cataract, glaucoma, keratomalacia, errors in refraction. Another potent cause is couching by itinerant quacks who roam about from place to place in search of victims.

Good eyesight is one of the most precious and greatest blessings of life and to prevent blindness or to relieve it is an act of humanity nobler than any other form of charity towards suffering fellow-men. Here, below I am giving a few preventive measures for the benefit of the readers and their friends.

The new-born babies should get a drop of Silver Nitrate solution ($\frac{1}{2}$ per cent) into their eyes soon after birth followed by pure Castor oil, because the babies' sore eyes generally develop between the 2nd and 5th day of birth. This is a very dreadful disease due to an infection from gonococcus during birth. If the cornea is affected with purulent discharge, saline wash and drops of Argyrol or Mercurochrome should be instilled as first aid till the Eye Doctor sees the child.

All school children and college students should be examined by an eye specialist once a year and errors of vision should be immediately corrected and eye diseases treated. I know several instances where the students' eye defects and diseases were pointed out to the respective parents many of whom never gave a second thought to their boys' eyes, whose studies depend mostly on their good vision. The prejudice to wear glasses should be combated. Each one should protect his or her eyes from the glare of the sun and dazzling light. Nourishing diet containing protective food-stuffs such as butter, milk, green leafy vegetables etc., should be given in a generous measure.

Cataract cases should be examined very often and as early as possible in order to ascertain definitely whether they suffer from cataract or glaucoma or optic atrophy. I don't see why couching by quacks should not be penalised.

Propaganda among the public regarding the proper care of the eyes should be carried on regularly.

Eye hospitals in each district should be started and blind relief associations must be established under the patronage of the government.

As trachoma or granular lids are responsible for a great percentage of

blindness in India, the importance of consulting an eye specialist must be pointed out to the sufferers. Many use Silver Nitrate and Copper Sulphate indiscriminately at home and thereby endanger the eyes. Keratomalacia, very common in children, is due to deficiency of vitamin A in their food, chiefly in illnourished and artificially fed children. The best remedy is to nourish the child well by giving fresh cow's milk, butter, butter-milk, ghee, and orange juice.

In many cases of smallpox, the cornea is usually affected and the eye is lost through the carelessness of the parents and guardians. The disease can be prevented if vaccination is done. Locally the eye should be gently washed with Normal Saline and Collargol ointment applied at bed time If the cornea is affected the Eye Doctor must be called in.

HEALTH IN ALPHABET

As soon soon as you are up shake blanket and sheet.
Better be without shoes than sit with wet feet.
Children, if healthy, are active, not still.
Damp beds and damp clothes will both make you ill.
Eat slowly and always chew your food well.
Freshen the air in the house where you dwell.
Garments must never be made too tight.
Homes should be healthy, airy, and light.
If you wish to be well, as you do I've no doubt,
Just open the windows before you go out.
Keep the rooms always tidy and clean,
Let dust on the furniture never be seen.
Much illness is caused by the want of pure air.
Now, to open the windows be ever your care.
Old rags and old rubbish should never be kept.
People should see that their floors are well swept.
Quick movements in children are healthy and right.
Remember the young cannot thrive without light.
See that the cistren is clean to the brim.
Take care that your dress is all tidy and trim.
Use your nose to find if there be a bad drain.
Very sad are the fevers that come in its train.
Walk as much as you can without feeling fatigue.
Xerxes could walk full many a league.
Your health is your wealth, which your wisdom must keep.
Zeal will help a good cause, and the good you will reap.

—*Dr T. D. Prasad*, M.B.

HEALTH

By K. R. KAMAT, M.B., B.S.,
Bombay.

WHAT is health? It is nothing but our capacity to enjoy and relish our legitimate appetites. Hence it is the best of wealth. Deprived of the same, life becomes a bore.

There is a saying which means "one who knows how to eat, knows no ill-health." It sounds so simple as one may ask 'who does not know the art of eating?' But my observation tells me a sorry tale. Hence I have written a few words on the oft written and talked-about subject of correct eating.

The most important thing to remember is '—God has given us teeth and they are found only in the mouth. Lower down the digestive apparatus, we have no teeth at all. People who bolt in their food in no time, perhaps imagine that either teeth are a decoration only or some more may be found in the abdominal cavity to carry on the work they are intended by nature to do. It is silly to argue that so-and-so who never made use of his teeth is enjoying the best of health. Exceptions prove the rule. Majority suffer from some health trouble or other which can be traced to bad way of eating.

To be short, those who make the best use of their teeth succeed in giving good relief to the digestive organs to function well and for a good old age.

Thorough mastication of all food whatever its nature be, is most essential if we want our digestive system to work normally till a good old age. No exception can be made to this rule on the pretext that the food is soft. Especially so regarding foods called carbohydrates, rice etc. They undergo a part of their digestion in the mouth itself through the agency of the saliva and made possible if food is retained in the mouth for some time during mastication to give time for the saliva to exert its digestive action. Saliva is a very jealous mistress, and refuses to come if you take the aid of water to wash down your food. It appears on the scene only if you masticate your food and not get into the pernicious habit of drinking a mouthful of water for every morsel of food.

Even regarding other kinds of food thorough mastication is an absolute necessity. By grinding down every particle of food into the smallest dimension you will make the work of the internal organs simple and easy. They can work efficiently for many long years. Digestive juices can work better if the food we eat is ground into the smallest particles possible before swallowing.

And that has to be done in the mouth only with the aid of the teeth. Because, the secretion of the digestive juices so essential for good digestion is in direct ratio to the secretion of saliva which in its turn is so much dependent on thorough mastication. So, discard the aid of water and take to mastication. You will be on the right royal road to certain health. Mastication gives good exercise to the teeth and gums and helps them to become strong and healthy to serve us long.

Secondly during mastication the food is being played on our tongue for some time. We know what we are eating can enjoy the same. The bolter of food knows not what he is eating, nor its taste nor its relish. I pity the man who eats his food without enjoying it. After all what do we toil for, day and night, if not to eat. Let our eating be a joy in itself though we eat to live.

Guinea-worm Infection And Its Prevention

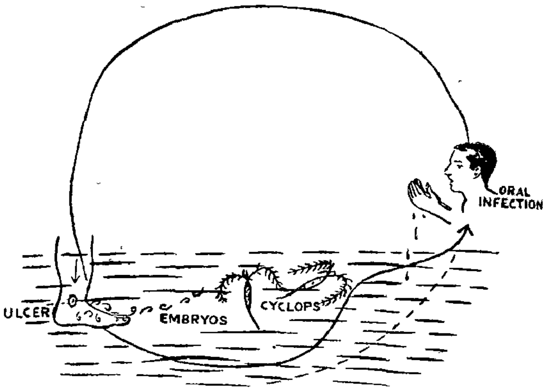
By
Dr. V. Krishnamurthi Rao,
D.M. & S., L.P.H.,
Municipal Health Officer,
Srivilliputtur.

GUINEA-WORM infection even though rarely fatal causes permanent deformity and discomfort, and is an easily preventable disease. It is prevalent in our province where the step wells form the main source of drinking water.

The person suffering from guinea-worm ulcers when he wades in water either for a bath or to take water in a pot, the gravid female guinea worm present in the ucler ejects a milky fluid which is full of guinea-worm embryos. These embryos or the young ones of the guinea-worm are devoured by certain single eyed aquatic insects called cyclops which are about the size of bug and are translucent. They are visible in step well water when viewed in glass test-tubes or bottles. When water containing such cyclops is drunk by healthy persons these cyclops get killed by the gastric juice of the stomach and the guinea-worm embryos are liberated, and they mature into male and female adult guinea worms in the intestines. After some time the male worm dies and the gravid female makes its way to the subcutaneous tissues which are likely to come in contact with water frequently like the knee and the ankle and in case of water carriers the shoulders also. Guinea-worm may also appear at other parts of the body also as the elbow, tongue etc. Once again the same cycle of events occurs as shown in the figure, when the worm comes in contact with water.

Prevention.—(1) Personal prophylaxis, (2) boiling the water used for drinking and (3) filtering the water with two or three layers of muslin cloth before drinking. The former method kills the cyclops and the latter prevents its getting in to our drinking water.

II. **Care of Water Sources.**—(1) Conversion of step wells into draw wells and (2) preventing people, especially guinea-worm patients, from actually getting into the water.



III **Biological Control**— As guinea-worm season generally starts in summer months *i.e.* March to June, steps should be taken sufficiently early before the onset of summer to treat the water sources wherefrom the public take water, with either percholorn or Bleaching powder or Quicklime which is easily available in every village The quantity being judged according to the volume of the water to be treated at least twice, thrice or even more times in a month. After such treatment for four or five times care should be taken to see that big predatory species of fish or aquatic animals as tortoises are not present in the water source. These can

be got rid of by either excess chlorination or angling or netting. After these preliminaries small cyclopcidal fishes such as Barbus Dorsalis, Rosbora Daniconius, Barbus Sophor may be stocked in these wells. These fishes are available locally and can be got from any local tank, pond, or any running stream or channel. As these prey on cyclops they will automatically serve as anti-guinea-worm agents.

Treatment of the sick.— Guinea-worm likes cold water. So mere cold water dressing for the wound and rolling the outcoming to a match stick will facilitate its traction. Care should be taken to see that the worm does not break during the process as this will give rise to serious toxic disturbances. The dressings should be burnt and should never be thrown near water sources.

GLIMPSES OF MEDICINE IN THE AGE OF RAMAYANA

By
D. V. S. REDDY,
Andhra Medical College, Vizag.

Gods of Healing.— The Ramayana contains the earliest reference to Dhanvantari, the embodiment and preceptor of the Science of Life (Ayurveda), as an Incarnation of Vishnu. The story of the churning of the ocean of milk itself requires prolonged churning before the present generation can get the valuable facts out of it which may be briefly described here. In Kritayuga, the sons of Diti as well as their rivals, the sons of Aditi reflected on how they could become exempt from decrepitude and disease. It struck them that by churning the ocean of milk, they could obtain Ambrosia. So they began to churn the ocean of milk, making Vasuki the cord and Mandara Hill the stick. As the process went on (after 1,000 years) there came out a powerful poison (like unto fire) which the living beings could not stand. To save the world from destruction, Hara swallowed it like Nectar. Churning was continued. After a lapse of another interval of time (1,000 years) there arose a male being, impregnated with Ayurveda, of exceedingly righteous soul, called Dhanvantari, bearing in his hands a stick and a *Kamandala*. Other precious and wonderful things followed. Finally came forth 'the excellent Ambrosia' the Elixir of Life, for which all the Devas and the Danavas were striving, undaunted by all obstacles. "And tremendous was the carnage for the possession of Ambrosia. Aditi's and Diti's sons fought each other. Seeing the great havoc, the great Vishnu assumed a captivating form and speedily stole away the Ambrosia."

But allusions do occur to the Vedic Physicians, Aswins, though not to their powers of healing. The Sun is compared to Aswins. Can it be said that this indicates Preventive and Curative medicine? In the age of Ramayana, the Aswins were not the familiar healers that they were in the Vedic Times. They were worshipped by couples for offspring. Rama and Lakshmana following their preceptor Viswamitra, are compared to Aswins in grace endowed with youth. In describing Vishnu, Aswins are said to be his ears, while the sun and the moon are called the eyes of Vishnu.

References to Physicians.—When Bharata started to the forest on his

quest of Rama, many citizens, of principal classes, followed him. In this list of persons and professions joyfully thinking to see their beloved Prince, Rama, "Physicians" are also mentioned.

When Bharata caught up Rama at Chitrakuta, Rama enquired of the conditions at Ayodhya and added, "Do thou show regard to duties, preceptors, physicians and brahmins."

Rama, in instructing Bharata in the art of Government, mentions a political precept which shows how astute he was and how some of the physicians were intriguers. He says, "He (The King) that does not slay a physician skilled in (bad) ways and means, a servant given to enlisting his fellow servant's sympathy, against his master, is slain by them."

Popular Medicine.— When Rama became overwhelmed with grief by false report that Sita was beheaded by Indrajit, the Kshatriya dropped down to earth in the midst of the Vanaras. They immediately rendered First-Aid, sprinkling water, scented with lotuses.

After destroying Ravana and setting free Sita, Rama told her that she was free to go wherever she liked and added "Standing before me (you) are distressing me like a lamp before one who is subject to an eye-disease."

On the return of Rama to Ayodhya, after years of hard life, walking and fighting, before he was installed on the throne, Rama was given a sacred bath at which "Skilful and quick-handed barbers" gathered round Raghava to massage the body.

The sages of the forest, in the course of their talk with Rama, refer to the responsibilities of a sovereign "Even as a child in its mother's womb should be protected by her, so should we be protected by thee."

Questions in Physiology.—(*a*) As a result of the sacrifice performed by Dasaratha, a blazing person emerged out of sacrificial fire and handed over to the king a covered vessel "filled with celestial *payasa*, conferring sons, health and affluence." This precious substance was to be administered to the royal consorts to make them bear children. Is this any glandular or endocrine or vitamin E preparation?

(*b*) Sampathi (a Vulture) alludes to a very interesting question, relating to the physiology of sight in birds. He states that the birds have clairvoyance and adds "owing to the energy due to feeding on certain kinds of flesh, can see a long distance. God has ordained for them (birds) such food as gives them power to see great distances, while cocks and other birds, living under the trees, have their sight limited to the extent they require to see."

Public Health.—Rama enquires of Bharata whether the provinces of the Kingdom of Ayodhya are provided with "good tanks and places for distributing water."

Narrating the greatness of the city of Ayodhya, the poet says that all men there, were long-lived and that there were no brahmins of insane mind or afflicted (with disease).

During the preparations for the Horse-Sacrifice, "the aged, the infirm, the women and children were continually fed." People were given clothing too. Travellers from other kingdoms also were provided with food and drink.

Reference to Medicines. — Among the presents brought by monkeys to Sugriva, on the occasion of his coronation, were two substances, likely to be used as medicinal drugs—*Gorochana* and *Red Arsenic.*

Describing how Ravana did not listen to the sound advice of Maricha, the poet comments "As a person desirous of meeting his end doth not take medicine, Ravana paid no heed to the words of Maricha."

Jatayu, giving information to Rama regarding the abduction of Sita, says:

"The Goddess whom thou hast been searching for in this forest, like unto Oshadi, has been carried away by Ravana."

Describing the Hill, Mahendragiri, the poet says, ' and these Medicinal herbs that grew there, albeit endowed with the virtues of neutralizing poison, could not tame the venom of the serpents."

Rama asks Hanuman to repeat what Sita had said "I shall live by these words as the sick are cured by Medicine."

Again, Rama, encamped on the northern shore of the Ocean, thinks of Sita and exclaims "Like unto the sick drinking the Elixir of life, when shall I .. "

Janaki, in an attempt to goad Lakshmana to rush in search of Rama, hunting the golden deer, says "without Rama, I shall drink virulent poison or enter fire or dive into Godavari or die by hanging"

Strange and Wonderful Practices.—People believed that sacrifices performed with the help of *mantras* would bless them with offpsring. Dasaratha is assured by Rishyasringa that with the help of mantras, laid down in Atharvaveda, he would celebrate the famous ceremony, capable of crowning the king with offspring.

Viswamitra communicates to Rama two *Mantras* (spells) which he calls "the nurses of all knowledge." They were known as "Bala and Atibala" and persons knowing these charms were believed not to feel fatigue or fever or undergo any change of looks. Sampathi relates how Vasava,(knowing that Sita, plunged in grief, will refuse all food and viands supplied by Ravana) offered Vaidehi *payasa* like Ambrosia, difficult of being procured even by gods. "Receiving that food, she took a little of it from the surface and dropped it to earth for Rama and Lakshmana" to save them form the pangs of hunger.

Types of Deformities.—As far as the Kingdom of Kosala is concerned, the only reference to the existence of the deformed is in *Ayodhya Kandam* It is probably not far from truth to say that all the sufferings of Rama and the essence of the story of the Epic were the outcome of the mischievous counsel of a crooked woman, the humpbacked Manthara, the old servant of Kaikeyi. Addressing the old hag, Kaikeyi says, "there are many deformed and crooked and unsightly women on earth." Manthara is described as having a pair of humps. "Thy breast weighed down by the hump is high near the shoulders."

The list of deformities becomes long and interesting and intriguing in the last part of the Epic, describing the Rakshasas and the occurrences in the forests and Lanka. Certain names, are by themselves very expressive of the physical features of the persons, *e.g.* Kumbakarna, Hraswakarna, Hastimukha, Vajra-Danstra, Somitaksha, Mahodara, Atikaya. In describing the peculiarities of the inhabitants of Lanka, the poet mentions the following types; having single eye having the same complexion (probably rare one); single breast dangling down (result of mutilation); dwarfs frightful to behold; deformed.

Hanuman observed a number of grim-visaged Rakshasas surrounding Sita in the Asoka garden. Leaving out many rare and fanciful forms, one may specially note the undermentioned physical deformities.

(1) Some had one ear and some had formidable ears, while some others had no ears. Some had long ears.

(2) Some had long lips.

(3) Some had big noses.

(4) Some had disfigured countenances and fearful faces.

(5) Some had faces like those of a bear,a dear or tiger or buffalo (Masks).

Anthropologists would find the following observations worth their

study. Hanuman says that some of the people had the upper parts of their body unusually longer and bulky. Some had long bellies. Some had long knees. Some were terribly black. Rama's body build is described in great detail and was considered an ideal type for human form and shape.

Deformities of Clinical Interest.—While I am aware of the caution required in suggesting modern explanations to ancient descriptions, I feel justified in drawing the attention of learned men, medical and nonmedical, to the brief description, preserved by Valmiki, of the physical peculiarities of some of the people of a dim and hoary past. Indian readers, most of whom are strangely ignorant and indifferent to history of medicine, and the numerous and interesting medico-historical studies of Greek, Roman and English poets and literature, may be surprised to learn that it is by a close study of such words, lines, passages from ancient authors, that scholars have succeeded in reconstructing the picture of the state of medicine in Ancient Greece and Rome and mediæval England. Here are the descriptions.

(1) Some had a nose projecting upwards (Tumour).

(2) Some had faces and eyes beyond ordinary proportions.

Some had long faces. Some had terribly huge heads (Acromegaly).

(3) One's person was so thickly covered with hair that he appeared to have been cloaked in a blanket (Hirsutism).

(4) Some had legs like those of a camel (lean, wasted muscular atrophy). Some had legs like those of an elephant. Some had huge legs. (This agrees remarkably with modern descriptions of Elephantiasis).

(5) Some had heads placed on their breasts (Disease of the Spine).

(6) Some had only one leg or only one hand (result of mutilation or accident).—*Indian Medical Record.*

WHO WILL PAY FOR THE CARE OF BEGGARS?

The total number of beggars in India is estimated at 14 lakhs. Many of these are found in the big cities and towns. In Madras alone it is estimated that there are more than 7,000. According to a survey made in 1932, there were 4,000, beggars in Calcutta of whom about 25% were lepers, 10% blind, 5% lethargic, 5% suffering from miscellaneous diseases, while a small fraction included the insane, deaf and dumb. The remainder, namely, 50% of the professional beggars and vagrants, did not show any disease or physical disability. Of this total of Calcutta's beggar population, one-third belonged to Bengal, one-third to Bihar and Orissa and the remaining to the U.P., C.P., and other provinces. The females numbered a little less than half the males, and the Hindus were double the number of the Mahommedans.

According to a recent census, there were 5,749 beggars in Bangalore City and 2,800 in Mysore City. Of these some 2,000 are non-Mysorians. There are altogether 3,937 able-bodied and 1,812 infirm beggars in Bangalore City, and in Mysore City 2,133 and 678, respectively. The majority of them have no other means of livelihood. Only about one-third of those in Bangalore and one-fifth in Mysore have had some occupation prior to taking to begging. In Lucknow there are 2,000 beggars and daily some Rs. 500/- are given away in indiscriminate charity. Figures are not available for other cities nor do we have any accurate data for the important cities like Bombay, Calcutta, Madras etc. All the same, we may conclude that there has been an alarming increase of beggars in cities and towns.

During the last two years there has been increased attention given by the public to the beggar problem in many cities and towns in India, among these being Bombay, Madras, Calcutta, Trivandrum, Kottayam, Ernakulam, Bangalore, Mysore, Karachi, Lucknow, Nagpur and Hyderabad. The All India Women's Council have been active on this issue all over India. Concern about this problem is not of recent origin. It has been engaging the attention of provincial governments, local bodies and the public for more than two decades. It was as early as 1915 that the Bombay Municipal Corporation interested itself in this problem. In 1919, the Government of Bombay appointed a Committee to report on beggary in the Province with a view to preventing it. The appointment of the Pickford Mendicancy Enquiry Committee in 1920, was an indication of concern of the citizens of Calcutta of those days with regard to the eradication of this evil. The recommendations of the Pickford Committee were not carried out owing to financial difficulties.

There have been in existence of old and recent origins in different cities and towns a small number of institutions private, grant-in-aid and public, which were taking care of the destitute and infirm. In Bombay, for instance, there are two Children's Homes—grant-in-aid institutions run by the Children's Aid Society; there are two Homes for the blind. Here is the King George V Memorial Infirmary, the Lady Dhunbai Jehangir Home for the Destitute, and the Dharmasala in Byculla, maintained by the District Benevolent Society. In Calcutta there are five agencies and the Corporation is thinking of starting a new Vagrants' Home. The Madras Corporation is already running a poor house and is contemplating to build another. In Nagpur, the Society for the Elimination of Beggary—a privately constituted body of public minded citizens of the city—is active and has been raising funds, and planning to start poor houses. In the meanwhile, they have adopted a system of billetting beggars on their relations and friends, or some other institution with the help of a monthly subsidy. In Karachi, it is proposed to confine able-bodied beggars in a separate ward in jails and inculcate in them the habit of industry and work. In Lucknow, the Social Service League has opened a poor house. Trivandrum, Kottayam and Bangalore have homes for the poor.

Regarding legislative measures, the law on begging as it stands in India concerns itself only with prohibition but not with relief. For instance, the Central Provinces Municipalities' Act, (Section 206), penalises importunate begging in public places without offering relief to the beggars. The Government of India published on 15th February 1941, an amendment to the Rules under the Indian Railways' Act prohibiting begging in railway premises or trains without making any provision for relief. Section 109 of the Criminal Procedure Code, penalises a vagrant without ostensible means of livelihood but makes no provision for such means. Certain Police Acts in India prohibit begging without providing alternative means of livelihood. Exceptions to this rule are the European Vagrancy Act and the Leper Act which lay an obligation on the State to provide means of subsistence to the persons concerned.

The Madras Government, published a Bill on 26th November '40, to amend the present Madras City Police Act to penalise begging in public places. The C. P. Government issued a circular in January 1939 inviting all Deputy Commissioners to explore the possibilities of using Section 206 and Section 179 (1) (EE) of C. P. Municipalities' Act to deal with beggary. The Government of Sind has appointed a Committee to deal with this problem. There is a Bill in the Sind

Legislative Assembly to penalise begging by able-bodied beggars. The District Magistrate of Bangalore (Civil and Military Station) has, under Section 64 of the Bangalore Police Law, absolutely prohibited begging in public places in his jurisdiction. Similar action has been reported in Secunderabad. The Calcutta Corporation has a Vagrancy Bill under consideration.

In spite of the prohibitory legislations in the major cities, either because of the laxity in enforcing them or due to the comparatively light punishment involved, beggars are still present on the streets of Madras and other cities.

Mere prohibition without adequate provisions for relief is not going to solve the beggar problem. Now the question arises: Who will pay for the care of the beggars? Will the State take the responsibility, or should the beggars be left to shift for themselves without begging, or should voluntary agencies give them institutional care? Voluntary agencies though indispensable are not adequate to meet the need. Government action is necessary not only to prohibit begging but also to finance poor relief from public taxation. Private agencies carrying on with voluntary donations can continue as supplementary and co-operating institutions.

Unless legislation is effected both for prohibition and relief on an All-India scale there is the danger of many embarrassing situations arising in different places. For instance, the Calcutta Vagrancy Bill recommends the repatriation of extra-territorial beggars. Where will they go and what will they do? The drive against begging in public by the Secunderabad Police authorities has made many beggars take to different avocations. Some have gone to villages and set themselves as money-lenders and fortune-tellers, while others who are still in the city are believed to be working as magicians and trinket-sellers. There is no reason to assume that many of the beggars would prefer security and compulsory detention in a poor house or jail to freedom outside with all its risks of insecurity. Many beg because it is not an offence, because it adds to their income; further, the comparatively slight odium associated with begging, and the public at large, with the traditional idea of religious merit derived from almsgiving, indirectly encourage begging. It will be as hard to take the almsgivers off the streets as to prohibit begging. Many of these donors may not contribute towards the maintenance of a poor house. The public is to be educated to think of beggary as a social problem to be solved by organized, concerted effort. What is given now indiscriminately and haphazardly ought to be pooled together to run central agencies where beggars will be cared for. But institutions dependent mainly on voluntary contributions alone will not be enough to meet the need. Government has to share a major portion of this burden.

A special ear-marked tax may be levied to meet the need. In the Note prepared by the Calcutta Rotary Club on the beggar problem, it was suggested that there should be an increase in the tax on trade licenses by 12.5%. Another suggestion made in that Note was the levying of a surcharge on the applications for building plans in Calcutta. There are evidences to assume that the public at large will be sympathetic towards legislation to prohibit begging in public places, to make it obligatory on local bodies to give relief and to levy tax to meet the expenses for the same. Poor laws, doles, work relief, unemployment insurance, social security legislation etc., are only too common in many western countries. It is not any too early for us to make a start by taking care of our beggars efficiently and adequately.—*The Municipal Gazette.*

Topics from Medical and Health Periodicals

Treaty

I WISH that I could sign a pact
Some day with my digestive tract.

A non aggression treaty of
Complete accord and lasting love.

Then I would pledge myself to shun
All nightly snacks at twelve or one.

All salads with cucumber in,
All portions redolent of gin.

All pastries of the species which
Are *dangerously* over-rich.

Oh! such a pact I'd gladly sign
With that digestive tract of mine.

But then I doubt that it could be
Made to negotiate with me.

For it has reason to be sure
I'd not respect my signature.

—*Richard Armour in New York "Sun."*

Bargains in Health

PLEASE stop annoying me with your thresh. You advertise great bargains in all kinds of diseases for one dollar. I am not interested in your diseases, keep them yourself. I and my family are interested in Health. But this is not your line. There is no money in Health for you. You study disease, you talk disease and you act disease and most of you have disease. It is very common to hear of a heart specialist kicking the bucket from his own pet disease. Disgustingly yours.—*J. A. M. A*, Aug. 30, 1941.

Sensitive to Soaps

THE composition of the various soaps not only varies from soap to soap but may vary materially in different batches of the same brand. In general soap is a sodium or potassium salt of any of the higher fatty acids. The fats used vary greatly from time to time, depending on their market price and availability. Some of the common fats used are cotton-seed oil, cocoanut oil, corn oil, linseed oil, kapok oil, rapeseed oil, olive oil, palm oil and sunflower oil. In addition, many animal fats are used, a few of which are prime tallow, bone grease, packing house grease and garbage grease. To these oils are added one or more of the following simple chemicals: sodium silicate, sodium metasilicate, trisodium phosphate, disodium phosphate, anhydrous tetrasodium pyrophosphate, sodium hydroxide, potassium hydroxide and sodium carbonate. These are the chemical constituents that go into most soaps. In addition, various soaps contain perfumes or scenting substances. It is these scenting agents which are usually the cause of allergy.—*The Journal of the American Medical Association.*

Nutrition

AS was pointed out by Sir John Russel, who toured India a few years ago and made a comprehensive report regarding the agricultural policy to be pursued in this country, the first need was for each province to conduct nutrition surveys to discover the chief deficiencies in diet and then with the help of the agricultural department and the rural development authorities, to encourage by all means the growth of those particular articles of food which are necessary to make up these deficiencies. Within the last few years, over 50 diet surveys have been carried out in various parts of India and the results of these surveys have been brought together in a booklet entitled "A note on the results of diet surveys in India" issued last year (1941), by the Research Fund Association.

It has been shown by experiment that a partial substitution of rice by wheat or by one of the millets grown in the country improves the diet considerably. The expansion of the cultivation of millets and the encouragement of their use by the people of rice producing areas require the earnest consideration of the authorities. Pulses can also supply some of the important factors in which rice is deficient. The Imperial Council of Agricultural Research has initiated a coordinated scheme of research in the provinces in order to investigate the *possibility* of developing strains of higher yield as well as of encouraging the extension of areas of pulses under cultivation.—*The Indian Medical Gazette.*

Protective Measures Against Heat

PROTECTIVE measures taken against heat vary with the type of climate. The Arab, in a hot dry climate, wears thick loose robes which shield him from radiation and set up mild connection currents whenever he moves. His houses are thick-walled and small-windowed, built about a central court yard and all openings are kept shuttered until evening. The Polynesian, living in moist heat, wears scanty clothing which cannot obstruct the evaporation of sweat into the almost saturated air, and builds his houses of lath and thatch lightly and airily. Only the European tries to rise above these obvious considerations, and builds identical hotels in dry and wet tropical lands. The ingrained but false conviction that the west must know best was illustrated when Florence Nightingale, wanted all Indian hospitals to have widely opened windows. It took the united voices of all the doctors in India and finally the command of the Viceroy to make it clear to her that the patients would be cooler with the windows shut. Foil surfaces can be used to reflect radiation, whether used in the construction of houses or of solar topees, topees lined with aluminium foil are now being worn by troops in the east and portable cubicles

insulated in the same way and supplied with air-conditioning plants are also in use. In hot dry climates the interference with air movement occasioned by the screening of doors and windows against mosquitoes is not detrimental, but that is a decided disadvantage in hot wet countries unless profuse sweating is taking place. Simple air-conditioning can be achieved by allowing a large fan to blow through some porous material such as hessian which is kept wet by water siphoning from a trough. But the maintenance of health in hot places turns finally on the common-sense and self-discipline of the individual himself. He must clear a careful course between the excessive heat production induced by violent experiences and the indolence which may grow on him mentally and physically. The margin of safety in the body's reserves is reduced in tropical climates and a man can less easily afford to ignore hygiene and offer dietetic insults to his organism. He must aim at a balanced diet with a high fluid and salt intake to meet the loss in sweat—at moderation in alcohol, a high degree of cleanliness, and early attention to ailments.—*Lancet.*

Leaflet Entitled "Should We Have A Baby in War-time"?

MANY husbands and wives are asking themselves the question "should we have a baby in war-time?" They are considering not only the dangers of the times in which they are living, but also the many other problems which nowadays affect parental responsibilities. Others go so far as to wonder if this is the sort of world into which it is right to bring children. The National Baby Welfare Council has published a leaflet setting out the following reasons why some parents and would-be parents have settled the question for themselves:—

Because:—1. Every woman desires to fulfil the function of motherhood for the simple, human reason that war or no war she wants to have a baby, and every man realises that marriage is incomplete without a baby.

2. There is no evidence to prove that war-time babies are not as healthy as peace-time babies.

3. Children turn a house into a HOME—and home life is still the basis of a sound national life.

4. We do not intend to be deprived of the happiness of children's love and laughter by the action of any other nation.

5. So many pleasures nowadays have to be denied that it is worth remembering that in parenthood there lies one of the most natural and abiding joys.

6. In spite of the war, maternity and child welfare services are available for expectant and nursing mothers and young children.

7. If there is one child only it is well, without undue space, to give it a brother or sister for comradeship in childhood and relationships in later life.

8. A husband does not want his wife to be lonely if, and when, he is called away to serve his country.

9. Recent advances in medical science have increased the safety, health and happiness of motherhood.—*Mother and Child.* Oct. 1942.

An Old Custom Refuted

IF there is a fever present, care should be taken of the diet. The old custom was to "starve a fever." We now know that this method was detrimental and hindered recovery because during fever the metabolism is increased and the body tends to live on its own food stores The burning of stored food eventually would produce a very toxic state, with possible damage to the liver. Taking our cue from this fact, we find that it is necessary to provide readily assimilated food during a fever. The best food is fruit juices. Dilute lemon, orange, grape and grapefruit juices may be given in large quantities so that the total intake amounts to three quarts daily. Barley water, or dilute milk, may also be used. A tablespoonful of honey or glucose or barley sugar, added to each glass of liquid helps to provide readily-burned carbohydrate. It is this carbohydrate or sugar that protects the liver from damage during a fever and aids in burning up the fevered toxins.

In conclusion, let us look upon fever as a friend and not as a foe, realizing that it is one of Nature's aids to the physician.—*Good Health (London).*

What is Diphtheria?

DIPHTHERIA is caused by the diphtheria germ, which grows and multiplies in the nose and throat of human beings. It will also grow in milk. But, as a rule, the main sources of infection are the noses or throats of human beings suffering from the disease, or of people who are "carriers." A diphtheria "carrier" is a person who harbours the diphtheria germ in his nose or throat without being ill himself. The carriers and the people suffering from mild attacks of diphtheria or cases which have been missed by the authorities and not properly isolated, are the principal sources of danger to the health of the general public.

Diphtheria germs are thrown off in the discharges which come from or are sprayed (in coughing and sneezing) from the noses and throats of carriers, and of people suffering from diphtheria.

So these germs pass from the nose or throat of a sick person into the nose or throat of a healthy person, and the damage is done. Fortunately, if the germs get absolutely dry they do no harm, but if they are in the least moist they are dangerous. By coughing, sneezing, kissing, or perhaps in noisy speaking, the dangerous spray is sent out from a person's nose or throat.

The disease may also be spread in other ways Infected spray from nose or throat may settle on articles used by or near to the

infected person. These articles, used immediately while the spray is still damp, may transfer the disease to a healthy person. Handkerchiefs, common drinking cups, certain types of drinking fountains, pencils, pins, needles, hat pins, pipes, half-eaten pieces of food, forks, spoons and such objects may be the means of conveying the germs of diphtheria from one person to another. So you will see why it is so important to train children in healthy habits.

In order to avoid this indirect infection, children should be taught never to put their fingers in nose or mouth, and never to use common drinking cups and towels—to use only their own handkerchiefs. (Note to speakers: Some mothers are very careless in the matter of handkerchiefs). They should be taught to place nothing in their mouths except food, water and the tooth brush, and always to wash their hands before eating. —*Mother and Child.*

Snake Bites and their Treatment

1. The first aid treatment is used if the patient is seen within ten minutes of the bite. Secure absolute recumbency. Fix a tight band immediately on the limb a few inches proximal to the bitten area and another ligature about 6 inches above. The ligature should be tight enough, but should not obliterate the arterial circulation. The limb having a single bone is the best site for ligature.

2. If the bitten area is a finger or a toe apply a ligature above and amputate the bitten part within 10 to 15 minutes.

3. If the bitten area is a flat surface or is very vascular immediately incise it about 1/8 to ¼ inch deep and ½ inch long and forcibly express blood and fluid as much as possible. Rub in crystals of potash permanganate

4 Cauterize the bitten area with strong acids, alkalies or burn it with live coal and keep the patient at perfect rest.

5. Give stimulants like spirit of sal volatile (Spt. Ammon Aromat) 10 to 15 drops in an ounce of water, coffee, etc, and wait for the physician. Keep the patient in bed.

6. Reassure the patient that the danger of the snake bite is usually overrated and that 2/3rds of all the bites are usually from non-poisonous snakes and therefore there are more chances of recovery and less of serious consequences —*Burma Medical Times.*

Ill Can Drive Out ill

"THE Statesman" of Calcutta writes :—

"We are told, from the evil of raids can be distilled some good. Oddly enough, they can have a temporarily beneficial influence on health This is being remarked in Calcutta, as earlier it was elsewhere. Doctors say that some sufferers from minor ills have in the excitement of raids so concentrated attention on these as to forget their other disabilities, which have languished and died out. Ill can drive out ill."

"In another way raids may be stimulating and perhaps beneficial. From many households the servants have gone (according to one interpretation in high places through interest apparently in the Christmas holiday): wherefore their employers, man and wife, have to do the chores, sweep and garnish, cook, and generally provide for their daily needs Some beauty experts think a short course of these domestic tasks good for health and figure, also they use up time that otherwise might be devoted to less innocent activities such as racing, gossiping and searching the shops for beer and cosmetics"—*Homoeopathic Outlook*, Jan, '43.

In Lighter Vein....

What to do in Case of an Air Raid ?

1. As soon as the bombs start to fall, RUN LIKE HELL.

(Wear track shoes if possible so that if the people *in front* of you are slow you won't have any trouble getting over them).

2. Take advantage of opportunities afforded you when Air-Raid Sirens sound the Warning —*i.e.*,

IF in a Bakery grab some PIE OR CAKE
IF in a Tavern, grab a BOTTLE
IF in a Movie grab a BLONDE
IF in a Hospital grab an INTERNEE

3. If you find an unexploded bomb always pick it up and shake well. Maybe the firing pin is struck. The fire department will come later and take care of things.

4. If an incendiary bomb is found burning in a building, throw gasoline on it. You can't put it out any how, so you might just as well have some fun. (The properties of the bomb free the hydrogen from the water, causing rather rapid combustion. In fact, it will explode with a Helluva Crash).

5. Always get excited and holler Bloody Murder. It will add to the confusion and fun, and scare the Hell outa everybody.

6. Drink heavily. Eat onions, Limburger Cheese, etc, before entering a crowded air-raid shelter It will make you very unpopular with the people within your immediate vicinity, eliminating any unnecessary discomfiture that would be more prevalent if people crowded too closely.

7. If you should be the victim of a direct bomb hit, don't go to pieces. Just lie still and you won't be noticed.

8. Knock the Air-Raid Wardens down if they start to tell you what to do. Don't take their lip. They always save the best seats for themselves and their friends, anyway.

FOLLOW THESE RULES AND YOU WILL NEVER BE IN ANOTHER AIR RAID.—*J.A.M.A.* —*G.P., July 15, '42.*